

IN THE CLAIMS:

Please amend the claims as shown below. The claims, as currently pending in the application, read as follows.

1. (Currently Amended) An interface apparatus for inputting information from an external apparatus, comprising:

a first circuit for, in a case where there is a change in ~~first input~~ information input from the external apparatus, fetching ~~second input~~ the information after an elapse of a predetermined time; and

a second circuit for, determining whether the information fetched by the first circuit matches a protocol of the information input from the external apparatus, and when the ~~second input~~ information fetched by said first circuit is not matched with ~~[[a]]~~ the protocol of the ~~first input~~ information input from the external apparatus, skipping the fetched information according to the protocol.

2. (Currently Amended) An apparatus according to claim 1, wherein said first circuit comprises:

a change detector for outputting a reset in the case where there is a change in the ~~first input~~ information input from the external apparatus;

a timer for inputting the reset output by the change~~[[d]]~~ detector and outputting a trigger after the elapse of the predetermined time from the input of the reset; and

a latch for inputting the trigger output by the timer and fetching the ~~second~~ input information.

3. (Currently Amended) An apparatus according to claim 1, wherein the external apparatus forms the ~~first input~~ information such that information is non-continuous information.

4. (Currently Amended) An apparatus according to claim 1, wherein the ~~first~~ information which is input from the external apparatus is input to the first circuit and the ~~second~~ information fetched by said first circuit is input to the second circuit.

5. (Currently Amended) A printer comprising:

a first circuit for, in a case where there is a change in ~~first input~~ information input from an external apparatus, fetching ~~second input~~ the information after an elapse of a predetermined time;

a second circuit for, determining whether the information fetched by the first circuit matches a protocol of the information input from the external apparatus. and when the ~~second~~ information fetched by the first circuit is not matched with ~~[[a]]~~ the protocol of the ~~first input~~ information input from the external apparatus, skipping the fetched information; and

a printer engine for printing the ~~second~~ information fetched by the first circuit ~~which if~~ it is determined by the second circuit to that the information fetched by the first circuit matches the protocol of the information input from the external apparatus.

6. (Currently Amended) An information processing method for inputting information from an external apparatus, comprising:

a first step of, in a case where there is a change in ~~first input~~ information ~~input from the external apparatus~~, fetching ~~second input~~ the information after an elapse of a predetermined time; and

a second step of, determining whether the information fetched by the first step matches a protocol of the information input from the external apparatus, and when the ~~second input~~ information fetched by the first step is not matched with ~~[[a]]~~ the protocol of the ~~first input~~ information input from the external apparatus, skipping the fetched information according to the protocol.

7. (Currently Amended) A method according to claim 6, wherein said first step comprises:

a change detecting step of outputting a reset in the case where there is a change in the ~~first input~~ information input from the external apparatus;

a timer step of inputting the reset output by the change detecting step and outputting a trigger after the elapse of the predetermined time from the input of the reset; and

a latch step of inputting the trigger output by the timer step and fetching the ~~second input~~ information.

8. (Currently Amended) A method according to claim 6, wherein the external apparatus forms the ~~first input~~ information such that same information does not continue.

9. (Previously Presented) A method according to claim 6, wherein the first step is executed by a glitch noise filter and the second step is executed by a logical filter.

10. (Currently Amended) A printing method comprising:

a first step of, in a case where there is a change in ~~first input~~ information input from an external apparatus, fetching ~~second input~~ the information after an elapse of a predetermined time;

a second step of, determining whether the information fetched in the first step matches a protocol of the information input from the external apparatus, and when the second information fetched by the first step is not matched with ~~[[a]]~~ the protocol of the ~~first input~~ information input from the external apparatus, skipping the fetched information; and

a step of printing the second information fetched by the first step ~~which if~~ it is determined by the second step that the fetched information matches the protocol of the information input from the external apparatus.

11. (Previously Presented) An apparatus according to claim 1, wherein, if the fetched information continuously repeats a same value, said second circuit skips the fetched information.

12. (Previously Presented) A method according to claim 6, wherein, if the fetched information continuously repeats a same value, said second step skips the fetched information.

13. (Currently Amended) An interface apparatus for inputting information from an external apparatus, comprising:

a change detector for detecting a change in ~~first input~~ information input from the external apparatus and outputting a reset upon the detection of the change;

a timer for inputting the reset output by said change detector and outputting a trigger after an elapse of a predetermined time from the input of the reset;

a latch for inputting the trigger output by said timer and fetching ~~second input~~ information upon the input of the trigger; and

a logical filter for, determining whether the information fetched by the latch matches a protocol of the information input from the external apparatus, and when the ~~second~~ information fetched by said latch is not matched with ~~[[a]] the~~ protocol of the ~~first input~~ information input from the external apparatus, skipping the fetched information.

14. (Currently Amended) An interface apparatus for inputting information from an external apparatus, comprising:

a change detector for detecting a change in ~~first input~~ information input from the external apparatus and outputting a reset upon the detection of the change;

a timer for inputting the reset output by said change detector and outputting a trigger after an elapse of a predetermined time from the input of the reset;

a latch for inputting the trigger output by said timer and fetching ~~second input~~ information upon the input of the trigger; and

a logical filter for, determining whether the information fetched by the latch matches a protocol of the information input from the external apparatus, and when the

second information fetched by said latch is matched with [[a]] the protocol of the first input information input from the external apparatus, outputting the fetched information.

15. (Previously Presented) An interface apparatus for inputting information from an external apparatus, comprising:

a timer for timing a predetermined time; and

a comparator for making a comparison between a length of a low level state in input information within the predetermined time timed by said timer, and a length of a high level state in the input information within the predetermined time, and for outputting a low level signal if the comparison shows that the length of the low level state is longer than the length of the high level state, and outputting a high level signal if the comparison shows that the length of the high level state is longer than the length of the low level state.

16. (Previously Presented) An apparatus according to claim 15, wherein said timer outputs a trigger after an elapse of the predetermined time from a delimiter existing in the input information, and said comparator inputs the trigger and makes the comparison in accordance with the trigger.